

CLAIMS

1. A track tensioning system for a tracked vehicle including a hull supporting a plurality of mid rollers, a front idler wheel, a rear idler wheel, an idler wheel, a drive sprocket, and an endless track belt trained around the mid rollers, the idler wheels and the drive sprocket, the mid rollers and the idler wheels being mounted on a rail, comprising:

a cam plate, rotatably connected to the drive sprocket on a first end thereof, and to the rail on a second end thereof; and

a member, mounted at a first end thereof to the rail and at a second end thereof to said cam plate;

wherein said member has a variable length defined between an attachment point to said cam plate and an attachment point to said rail.

2. The track tensioning system according to claim 1, wherein said member is selected in the group comprising a spring, a hydraulic cylinder and a pneumatic cylinder.

3. The track tensioning system according to claim 1, wherein the drive sprocket is a drive wheel with teeth in driving engagement with the endless track belt in an endless path.

4. The track tensioning system according to claim 1, wherein the drive sprocket is mounted on a shaft selected in the group comprising a shaft of a motor and a chained shaft.

5. The track tensioning system according to claim 1, wherein the endless drive track is typically formed of resilient material.

6. The track tensioning system according to claim 5, wherein said resilient material is selected in the group comprising a rubber and a reinforced rubber.

7. The track tensioning system according to claim 1, wherein the endless drive track is provided with traction lugs on a first surface thereof, and with drive lugs on a second first surface thereof.

8. A track tensioning system for a tracked vehicle, comprising:

a cam plate, rotatably connected to a drive sprocket on a first end thereof, and to a rail supporting mid rollers and idler wheels of the tracked vehicle at a second end thereof; and

a member, mounted at a first end thereof to said rail and at a second end thereof to said cam plate;

wherein said dynamic member has a variable length.

9. The track tensioning system according to claim 8, wherein said member is selected in the group comprising a spring, a hydraulic cylinder and a pneumatic cylinder.

10. A track tensioning system for a tracked vehicle comprising a dynamic member supporting a sprocket of a tracked wheel of the tracked vehicle, wherein said dynamic member is forced against an endless track belt of the vehicle so as to maintain a constant tension thereof.

11. The track tensioning system according to claim 10, wherein said dynamic member is selected in the group comprising a spring, a hydraulic cylinder and a pneumatic cylinder.